REMARKS

A Request for Continued Examination was filed in the present application on August 28, 2002.

Claims 26-50 are now pending in the present application. Claims 26 and 36-38 are the independent claims.

As will be appreciated, Claims 26-36 were previously allowed in the present application. By this Preliminary Amendment, Claims 26-36 have been amended in a manner not believed to affect the allowability of these claims. Claims 37-50 are newly-presented. Claims 37-50 have been added to provide Applicants with an additional scope of protection. Support for the newly-presented claims can be found in Applicants' disclosure as originally filed. For example, support for newly-presented Claim 45 can be found at least at, for example, page 25, lines 12-17 of the specification. Thus, no new matter has been added.

The specification has been amended to correct minor informalities and to improve its idiomatic English form. Favorable consideration is requested.

Applicants submit that the present application is in condition for allowance. Favorable reconsideration and an early Notice of Allowance are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

Attorney for Applicants
Michael E. Kondoudis
Registration No. 42,758

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200
MEK\cmv

DC_MAIN 107243 v 1

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO THE SPECIFICATION

Please substitute the following paragraph for the paragraph starting at page 3, line 13 and ending at page 4, line 10.

--The diameter 2r of the nanoholes 35 and the hole-to-hole distance 2R can be controlled to a certain extent by adjusting the current and voltage during the anodization process. There is a barrier layer (aluminum oxide layer) 36 between the anodized film 32 and the aluminum substrate 31 or the aluminum film 34. [A various] Various applications are being attempted to take [the advantages] advantage of such peculiar geometric structures obtained in anodized films. For example, anodized films may be used as films having high abrasion resistance and high dielectric strength. An anodized film may be separated from an underlying material and may be used as a filter. Furthermore, by filling the nanoholes with metal or semiconductor or by using a replica of nanoholes, other various [application] applications are also possible, such as coloring, magnetic storage media, EL devices, electrochromic devices, optical devices, solar cells, and gas sensors. The anodized film is also expected to have further various applications such as quantum effect devices (quantum fine wires, MIM (metal-insulator-metal) devices), molecular sensors using nanoholes as chemical reaction spaces, etc. (Masuda, Solid State Physics, 31, 493 (1996)).--

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO THE CLAIMS

26. (Twice Amended) A method of producing a nanostructure comprising an anodized film including a nanohole on a substrate having a surface containing at least one material selected from the group consisting of semiconductors, noble metals, Mn, Fe, Co, Ni, Cu and carbon, [said nanoholes] the nanohole passing through [said] the anodized film from the surface of [said] the anodized film to the surface of [said] the substrate, [wherein] said method comprising the steps of:

(i) forming a film [containing] including aluminum on the substrate having a surface containing at least one material selected from the group consisting of semiconductors, noble metals, Mn, Fe, Co, Ni, Cu and carbon; and

(ii) anodizing [said] the film [containing] including aluminum,

wherein in step (ii) the [anodization] anodizing is conducted while monitoring an anodization current and the [anodization] anodizing of [said] the film [containing] including aluminum terminates after a reduction in [said] the anodization current from a steady-state value is detected.

27. (Twice Amended) A method of producing a nanostructure according to Claim 26, wherein the [anodization] anodizing terminates after the anodization current is decreased from the steady-state value [of] to 95% or below of the steady-state value.

28. (Amended) A method of producing a nanostructure according to Claim 26, wherein an anodization voltage is applied to [said] the film including aluminum, the anodization voltage being [is] supplied from the substrate side.

29. (Amended) A method of producing a nanostructure according to Claim 26, further comprising the step of expanding the diameter of the [nanoholes] nanohole by means of etching, after completion of said anodizing step.

30. (Amended) A method of producing a nanostructure according to Claim 26, further comprising the step of forming an anodization starting point on the surface of [said] the film including aluminum prior to said anodizing step.

31. (Amended) A method of producing a nanostructure according to Claim 30, wherein a recessed portion serving as [said] the anodization starting point is formed on [said] the film including aluminum prior to said anodizing step.

32. (Amended) A method of producing a nanostructure according to Claim 26, further comprising the step of embedding an inclusion into [said aluminum oxide nanoholes] the nanohole after said anodizing step, the nanohole comprised of aluminum oxide.

33. (Amended) A method of producing a nanostructure according to Claim 32, wherein [said] said embedding [of the inclusion] step is performed by means of electro-deposition.

34. (Amended) A method of producing a nanostructure according to Claim 33, wherein the surface of [said] the substrate includes a high-resistance part, and wherein said method further comprises [the] a step of converting [said] the surface at the bottom of the nanohole into a low-resistance surface prior to the electro-deposition.

35. (Amended) A method of producing a nanostructure according to Claim 34, wherein the surface of [said] the substrate includes a silicon oxide and [said] the surface is etched with an aqueous solution containing hydrofluoric acid or an alkaline aqueous solution.

36. (Twice Amended) A method of producing a carbon nanotube device, said method comprising the steps of:

forming a film including aluminum on a substrate having a surface including an n-type semiconductor region;

anodizing [said] the film including aluminum over the entire thickness thereof so as to form an anodized film having a nanohole;

electro-depositing a catalytic fine particle on the surface at the bottom of [said] the nanohole; and

growing carbon nanotubes from [said] the catalytic fine particle in the nanohole,

wherein in said anodizing step the anodizing is conducted while monitoring an anodization current and the [anodization] anodizing of [said] the film [containing] including aluminum terminates after [when] a reduction in [said] the anodization current from a steady-state value is detected.